

LI. Listing of Claims

Please amend the claims as follows:

CLAIMS

1. (Currently Amended) A suspension device (4) for the load-bearing and resilient support of a wheel (2) in a motor vehicle, comprising at least one spring cylinder (40) with a piston (14), which is guided in a manner moveable relative to it in a pressure cylinder (42), and comprising a driving device (20) including a gearwheel mechanism for converting pivoting movements of a wheel oscillating-crank supporting arm (4), which movements oscillate about an oscillating-crank axis (8), into the relative movements between the pressure cylinder (42) and the piston (14), the piston (14) acting counter to an elastically compressible spring medium (FM) in order to produce a load-bearing supporting spring force (F), ~~characterized in that the driving device (20) is designed as a gearwheel mechanism (22).~~

2. (Currently Amended) The suspension device ~~as claimed in claim 1,~~ characterized by according to claim 1 further comprising a damping device (50) for damping the suspension movements, the damping device (50) having, ~~in particular,~~ a separate circuit of a hydraulic damping medium (DM), which circuit is independent of the spring cylinder (40) and the spring medium (FM).

3. A suspension device (4) for the load-bearing and resilient support of a wheel (2) in a motor vehicle, comprising at least one spring cylinder (40) with a piston (14), which is guided in a manner moveable relative to it in a pressure cylinder (42), ~~and comprising~~ a driving device (20) for converting pivoting movements of a wheel oscillating-crank supporting arm (4), which movements oscillate about an

oscillating-crank axis (8), into the relative movements between the pressure cylinder (12) and the piston (14), the piston (14) acting counter to an elastically compressible spring medium (FM) in order to produce a load-bearing supporting spring force (F), and having a damping device (50) for damping the suspension movements, ~~characterized in that~~ wherein the damping device (50) has a separate circuit of a hydraulic damping medium (DM), which circuit is independent of the spring cylinder (10) and the spring medium (FM).

4. (Currently Amended) The suspension device ~~as claimed in~~ according to claim 3, ~~characterized in that~~ wherein the driving device (20) is designed as a gearwheel mechanism(22).

5. (Currently Amended) The suspension device ~~as claimed in claim 1, 2 or 4,~~ ~~characterized in that~~ according to claim 1 wherein the gearwheel mechanism (22) comprises a gearwheel element (24), which is connected or can be connected to the oscillating-crank supporting arm (4), and is mounted in a rotating manner about the oscillating-crank axis (8) and has at least a partial peripheral toothing, and a rack element (26) which is connected to the piston (14) or to the pressure cylinder (12).

6. (Currently Amended) The suspension device ~~as claimed in one of claims 2 to 5,~~ ~~characterized in that~~ according to claim 2 wherein the damping device (50) has at least one damper cylinder (70) having a damper piston (74), which is guided in a manner moveable relative to it in a the damper cylinder (72), and at least one damper valve (52), which is connected hydraulically to the damper cylinder (70).

7. (Currently Amended) The suspension device ~~as claimed in one of claims 2 to 6, characterized in that~~ according to claim 2 wherein the damping device (50) interacts with the same driving device (20) as the ~~each~~ spring cylinder (40).

8. (Currently Amended) The suspension device ~~as claimed in claim 6 or 7, characterized in that~~ according to claim 6 wherein the spring cylinder, on the one hand, and the damper cylinder (70), on the other hand, are driven by a common rack element (26) of the gearwheel mechanism (22).

9. (Currently Amended) The suspension device ~~as claimed in claim 6 or 7, characterized in that the/each spring cylinder (10)~~ according to claim 6 wherein one or more of the spring cylinders is driven by a first rack element (26) and ~~the/each damper cylinder (70)~~ one or more of the cylinders is driven by a second rack element (26), the rack elements (26) being arranged in particular essentially parallel to each other on diametrically opposite sides of the gearwheel element (24) of the gearwheel mechanism (22).

10. (Currently Amended) The suspension device ~~as claimed in one of claims 1 to 9, characterized by~~ according to claim 1 wherein at least one additional spring cylinder (40) which is driven by the same driving device (20).

11. (Currently Amended) The suspension device ~~as claimed in claim 10, characterized in that~~ according to claim 10 wherein the additional, ~~second~~ spring cylinder (40) is driven in a manner acting identically with respect to the first spring

cylinder (10), so that the partial supporting forces produced by the spring cylinders (10) add up to form the overall supporting force (F) for the suspension device.

12. (Currently Amended) The suspension device ~~as claimed in claim 10,~~ characterized in that the additional, ~~second~~ spring cylinder (10) is driven in each case in an opposed manner with respect to the ~~first~~ spring cylinder (10), so that the overall supporting force (F) arises from the difference of two partial forces.

13. (Currently Amended) The suspension device ~~as claimed in one of claims 1 to 12,~~ characterized in that according to Claim 1 wherein the spring medium (FM) is an elastically compressible liquid, such as silicone or the like, having a compressibility of at least 10% by volume, the spring medium (FM) being contained directly in ~~the/each spring cylinder (10)~~ one or more of the spring cylinders and ~~possibly or~~ in a storage reservoir (36) connected to the spring cylinder (10).

14. (Currently Amended) The suspension device ~~as claimed in one of claims 1 to 12,~~ characterized in that according to claim 1 wherein the spring medium (FM) is contained as a gas in a hydropneumatic spring energy store (40), ~~the/each spring cylinder (10)~~ one or more of the spring cylinders acting indirectly counter to the spring medium (FM) via a hydraulic medium (HM).

15. (Currently Amended) The suspension device ~~as claimed in claim 14,~~ characterized in that according to claim 2 wherein at least one damping valve is arranged in the circuit of the hydraulic medium (HM).

16. (Currently Amended) The suspension device ~~as claimed in one of claims 2 to 15~~, characterized in that according to claim 2 wherein the damping device (50) has two damper cylinders (70) having cylinder spaces (76) which can be changed in volume to the same extent in opposite directions in each case, the damping medium (DM) in each case flowing to and fro between the two cylinder spaces (76) and, in the process, via a damping valve (52) during the suspension movements.

17. (Currently Amended) The suspension device ~~as claimed in one of claims 2 to 16~~, characterized in that according to claim 2 wherein the damping device (50) has a tank (448) which is incorporated into the damping circuit.

18. (Currently Amended) The suspension device ~~as claimed in one of claims 1 to 17~~, characterized in that according to claim 1 wherein the gearwheel drive (22) is arranged in a housing space (78), the housing space (78) being incorporated into the damping circuit and, for this purpose, being at least partially filled with the damping medium (DM).

19. (Currently Amended) The suspension device ~~as claimed in one of claims 1 to 18~~, characterized by according to claim 1 wherein at least one hydropneumatic spring energy store (40) having a freely moveable separating piston (44) which separates a storage space (46), which is connected hydraulically to the spring cylinder (10) and contains a hydraulic medium (HM), from a spring chamber (48) containing the gaseous spring medium (FM).

20. (Currently Amended) The suspension device ~~as claimed in claim 19,~~ ~~characterized in that~~ according to claim 19 wherein the separating piston (44) can be acted upon by a counter pressure, on its side facing away from the spring chamber (48), independently of the pressure of the hydraulic medium (HM).

21. (Currently Amended) The suspension device ~~as claimed in claim 20,~~ ~~characterized in that~~ according to claim 20 wherein the separating piston (44) has a piston rod (94) which extends axially through the storage space (46) and, in a manner sealed by an intermediate wall (96), into a pressure space (98), it being possible for the piston rod (94) to be acted upon by the in particular pneumatic counter pressure in the pressure space (98).

22. (Currently Amended) The suspension device ~~as claimed in one of claims 1 to 21, characterized by~~ according to claim 1 wherein a hydraulic end position damping, in particular with at least one travel-dependent, hydraulic throttle device (104), which is integrated in the spring cylinder (10) ~~and/or~~ or in the damper cylinder (70), in such a manner that a braking of the suspension movements is ensured in each case toward the end of the movement stroke before a mechanical end stop is reached.

23. (Currently Amended) The suspension device ~~as claimed in one of claims 2 to 22, characterized in that~~ according to claim 2 wherein the damping device (50) has an additional device (124) in such a manner that small suspension movements on both sides of a static position are virtually undamped while damping starts automatically only after a certain spring travel.

24. (Currently Amended) The suspension device ~~as claimed in one of claims 2 to 23, characterized in that~~ according to claim 2 wherein the damping device (50) causes a damping in the rebound direction and, if appropriate, also in the compression direction.

25. (Currently Amended) The suspension device ~~as claimed in claim 24, characterized in that~~ according to claim 24 wherein the damping cylinder (70a) is designed as a double-action piston/cylinder unit with a first pressure space (76a) and a second pressure space (76b), the first and second pressure spaces (76a, 76b) being connected to a separate damping valve (52a, 52b) in each case.

26. (Currently Amended) The suspension device ~~as claimed in one of claims 1 to 25, characterized by~~ according to claim 1 wherein a hydraulic ride-height-adjusting device (150) in such a manner that a static vehicle ride height can be changed by feeding hydraulic medium (HM) into or letting it out from the spring circuit.

27. (Currently Amended) The suspension device ~~as claimed in one of claims 2 to 26, characterized by~~ according to claim 2 wherein a device (158) for changing the damping characteristic, it being possible for at least one adjustable damping valve (52; 52a, b) to be briefly acted upon via a switching valve (160) by an ~~in particular a~~ load-dependent control ~~control~~ pressure.